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10/715,897

11/18/2003

Per Andersson

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EXAMINER

HANDY, DWAYNE K

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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PER ANDERSSON

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Appeal 2009-003551  
Application 10/715,897  
Technology Center 1700

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Decided: February 26, 2010

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Before BRADLEY R. GARRIS, CHUNG K. PAK, and TERRY J. OWENS,  
*Administrative Patent Judges.*

GARRIS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1-12. We have jurisdiction under 35 U.S.C. § 6.

We AFFIRM for the reasons expressed in the Examiner's Answer and below.

Appellant claims a device for metering which comprises a trunk channel having a fluidic inlet and outlet and a branch channel in communication with the trunk channel and having a fluidic impedance

region, wherein the trunk channel, branch channel, fluidic inlet, fluidic outlet, and fluidic impedance are arranged "to permit the fluidic contents of the trunk channel to be flushed through the fluidic outlet while the branch channel remains substantially filled" (claim 1).

Representative claim 1, the sole independent claim on appeal, reads as follows:

1. A device for metering a microfluidic plug of fluid from a larger fluidic volume, the device comprising:

a trunk channel having a fluidic inlet and a fluidic outlet; and

a microfluidic branch channel in direct, independent fluid communication with the trunk channel, the branch channel having a fluidic impedance region;

wherein the trunk channel, branch channel, fluidic inlet, fluidic outlet, and fluidic impedance are arranged to permit a first fluid to be supplied through the trunk channel to fill the branch channel to the fluidic impedance region, and thereafter to permit the fluidic contents of the trunk channel to be flushed through the fluidic outlet while the branch channel remains substantially filled.

The references set forth below are relied upon by the Examiner as evidence of unpatentability:

Kellogg	6,063,589	May 16, 2000
McNeely	6,591,852 B1	Jul. 15, 2003

The Examiner rejects claims 1-3 and 7-12 under 35 U.S.C. § 102(e) as being anticipated by McNeely.

The Examiner rejects remaining claims 4-6 under 35 U.S.C. § 103(a) as being unpatentable over McNeely in view of Kellogg.

Appellant's arguments are directed to independent claim 1 only (Br. 5-7). Accordingly, all dependent claims including the separately rejected dependent claims will stand or fall with claim 1.

Appellant argues that the § 102 rejection of claim 1 is improper because McNeely does not satisfy the claim 1 functional requirement wherein the trunk channel, branch channel, fluidic inlet, fluidic outlet, and fluidic impedance are arranged "to permit the fluidic contents of the trunk channel to be flushed through the fluidic outlet while the branch channel remains substantially filled" (Br. 6). Appellant explains that "it is an objective of McNeely that the branch and trunk channels are both filled at one point so that the liquid in both of them can enter channel 1 in parallel thereby permitting mixing downstream of region b" (*id.*). According to Appellant, "[t]his is opposite of the presently [claimed] invention that requires that the trunk channel can be separately emptied with a first liquid while liquid is withheld in the branch channel" (*id.*).

Contrary to Appellant's last quoted statement, nothing in claim 1 "requires that the trunk channel can be separately emptied with a first liquid while liquid is withheld in the branch channel" (*id.*; emphasis added). Instead, as correctly pointed out by the Examiner (Ans. para. bridging 5-6), claim 1 requires "the fluidic contents of the trunk channel to be flushed through the fluidic outlet while the branch channel remains substantially filled" (emphasis added). With well presented reasoning, the Examiner has explained that McNeely's arrangement (Figs. 2A-2D; col. 14, ll. 1-38) permits the fluidic contents of the trunk channel (i.e., channel 1) to be flushed through the fluidic outlet while the branch channel (i.e., channel 2)

remains substantially filled (Ans. 6, last para.; *see also* Final Office Action 3-4).

Importantly, Appellant's above-noted argument does not even address, much less identify error in, the Examiner's reasoning despite the fact that the reasoning in the Answer corresponds to the reasoning in the Final Office Action.

Appellant also argues that the claim 1 preamble "[a] device for metering a microfluidic plug of fluid from a larger fluidic volume" should be considered to distinguish from McNeely's device (Br. para. bridging 6-7). We do not agree for the reasons well-stated by the Examiner (Ans. 7). Significantly, these reasons have not been rebutted by Appellant in the record of this appeal.

In light of the foregoing and for the reasons expressed in the Answer, we sustain the § 102 and § 103 rejections advanced by the Examiner in this appeal.

The decision of the Examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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